

CLAIMS

We claim:

1. A disconnect switch for installation in an electrical enclosure having a door, the switch comprising:

at least three switch poles, each switch pole having at least one pair of switch contacts;

a switch actuating mechanism for actuating and de-actuating the disconnect switch contacts;

a switching interface coupled to the switch actuating mechanism for receiving a selected switching assembly; and

a switching assembly selected from:

a first switching assembly that is installable in the switch enclosure on the switching interface, the switching assembly having a handle extending in opposite directions from a pivot for rotation in either rotational direction for actuating and de-actuating the disconnect switch contacts, respectively, the handle also being axially pressed inward prior to rotation, to effect actuation of the switch contacts; and

a second switching assembly that is installable in the switch enclosure on the switching interface and has a rotary mechanism that is coupled to the door handle when the door is closed and which is available when the door is opened to be rotated in either direction to actuate and de-actuate the disconnect switch contacts.

2. The disconnect switch of claim 1, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third switching assembly comprising a motion translator switching assembly that is installable in the switch enclosure on the switching interface to couple the rotary motion from a rotary switch on a side of the cabinet enclosure to a shaft extending from the switching interface toward the front door of the enclosure.

3. The disconnect switch of claim 1, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising a lockout assembly that is installable in the switch enclosure on the switching interface to lockout the switch actuating mechanism.

4. The disconnect switch of claim 1, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising an extension shaft for coupling to a door-mounted switch for actuating and de-actuating the disconnect switch contacts.

5. A disconnect switch for installation in an electrical enclosure having a door, the switch comprising:

- at least three switch poles, each switch pole having at least one pair of switch contacts;

- a switch actuating mechanism for actuating and de-actuating the disconnect switch contacts;

- a switching interface coupled to the switch actuating mechanism for receiving a selected switching assembly; and

- a switching assembly selected from the group comprising:

- a first switching assembly that is installable in the switch enclosure on the switching interface, the switching assembly comprising a motion translator switching assembly that is installable in the switch enclosure on the switching interface to couple the rotary motion from a rotary switch on a side of the cabinet enclosure to a shaft extending from the switching interface toward the front door of the enclosure; and

- a second switching assembly that is installable in the switch enclosure on the switching interface and has a button mechanism that is pressed axially inward to allow the switching assembly to be rotated in either direction and also has a handle that can be gripped and pulled outwardly to allow the switching assembly to be rotated in either

direction to actuate and de-actuate the disconnect switch contacts.

6. The disconnect switch of claim 5, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third switching assembly having a handle extending in opposite directions from a pivot for rotation in either rotational direction for actuating and de-actuating the disconnect switch contacts, respectively, the handle also being axially pressed inward prior to rotation, to effect actuation of the switch contacts.

7. The disconnect switch of claim 5, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising a lockout assembly that is installable in the switch enclosure on the switching interface to lockout the switch actuating mechanism.

8. The disconnect switch of claim 5, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising an extension shaft for coupling to a door-mounted switch for actuating and de-actuating the disconnect switch contacts.

9. A disconnect switch for installation in an electrical enclosure, the switch comprising:

- a switch body;

- at least three switch modules, each switch module enclosing at least one pair of switch contacts and a fuse and having at least a portion that is detachable from the switch body;

- a switch actuating mechanism for actuating and de-actuating the disconnect switch contacts in said three switch modules;

- a fourth switch module for attachment to the switch body and to at least one of the first three switch modules,

the fourth switch module being selected from a group comprising:

- a switch module having a network connector for connection of the disconnect switch contacts to a network and having mechanical and electrical connectors which connect to at least one of the first three switch modules to connect the switch modules to a network for sensing the on-off status of the circuits in the disconnect switch; and

- a switch module having switch contacts for at least one additional switch pole, said switch module being connected to the switch actuating mechanism for the disconnect switch.

11. The disconnect switch of claim 9, further comprising:

- a switching interface coupled to the switch actuating mechanism for receiving a selected switching assembly; and

- a switching assembly selected from:

- a first switching assembly that is installable in the switch enclosure on the switching interface, the switching assembly having a handle extending in opposite directions from a pivot for rotation in either rotational direction for actuating and de-actuating the disconnect switch contacts, respectively, the handle also being axially pressed inward prior to rotation, to effect actuation of the switch contacts; and

- a second switching assembly that is installable in the switch enclosure on the switching interface and has a button mechanism that is pressed axially inward to allow the switching assembly to be rotated in either direction and also has a handle that can be gripped and pulled outwardly to allow the switching assembly to be rotated in either direction to actuate and de-actuate the disconnect switch contacts.

12. The disconnect switch of claim 11, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third switching assembly comprising a motion translator switching assembly that is installable in the switch enclosure on the

switching interface to couple the rotary motion from a rotary switch on a side of the cabinet enclosure to a shaft extending from the switching interface toward the front door of the enclosure.

13. The disconnect switch of claim 11, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising a lockout assembly that is installable in the switch enclosure on the switching interface to lockout the switch actuating mechanism.

14. The disconnect switch of claim 11, wherein the switching assembly is selected from said first switching assembly, said second switching assembly and a third assembly comprising an extension shaft for coupling to a door-mounted switch for actuating and de-actuating the disconnect switch contacts.